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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/532,907	03/21/2000	Douglas J. Holmi	02103-366001	6793

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FISH & RICHARDSON PC
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER

LE, HUYEN D

ART UNIT	PAPER NUMBER
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2615

MAIL DATE	DELIVERY MODE
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03/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/532,907	Applicant(s) HOLMI ET AL.	
	Examiner HUYEN D. LE	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32,33,36,37,40,41,44-47,49 and 51 is/are rejected.
- 7) ☒ Claim(s) 34,35,38,39,42,43,48,50 and 52 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/20/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 32, 36, 40, 44-47, 49 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh et al. (U.S. patent 5,146,507) in view of Mougeot Cyril Patrice (FR 2779313) as cited by the Applicant.

Regarding claims 32, 36 and 40, Satoh discloses an audio system (Fig. 2) for an automobile (22) having a passenger compartment (23) with two front seats that correspond to the two seats claimed comprising: an audio source (10, 12, 14, 16) processor (18) and amplifier (20) arrangement that corresponds to the audio source claimed and has a plurality of output channels (FL FR RL RR) including a surround output channel (RL and/or RR) (column 5, lines 17-36), with the two seats positioned side by side. As such, Satoh anticipates all elements of Claim 32

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except a first plurality of substantially identical electroacoustical transducers for radiating sound waves corresponding to the surround channel positioned in said passenger compartment with an axis of each transducer generally parallel to an axis of rotation of an occupant's head such that when the occupant is in any of the two of the seats, the occupant's head is forward of, in a direct field of, and positioned substantially identically relative to a corresponding one of the electroacoustical transducers.

Patrice discloses a speaker system (Fig 2) with the electroacoustic transducers (4) for radiating sound waves from the surround channel signals. As shown in figure 2, the axis of the transducer (4) is generally parallel to an axis of rotation of an occupant's head when the occupant is in the seat.

Since Satoh and Partrice teach a speaker system having transducers for radiating sound waves corresponding to the surround channel; it therefore would have been obvious to one skilled in the art to provide the speaker system of Patrice to each of the front seats of the audio system of Satoh in order that a first plurality of substantially identical electroacoustical transducers radiate sound waves in the front seats corresponding to the surround channel positioned in said passenger compartment with the axis of each transducer oriented generally parallel to the axis of rotation of the occupant's head. This would provide the improved frequency response characteristics for the audio system in the automobile. It is inherent that when the occupant is in any of the two of the seats, the occupant's head is forward of, in a direct field of, and positioned substantially identically relative to a corresponding one of the electroacoustical transducers.

In addition to claim 36, Patrice further discloses positioning the speakers in a seat-back (Fig. 2).

In addition to claim 40, Patrice further discloses a set of speakers corresponding to an individual seat (Fig. 2).

Regarding claims 44-46, Satoh discloses a signal processor (18) coupled to the surround output channel and having an input to receive a signal from an auxiliary source as claimed in claims 44-46 (Fig. 2).

Regarding claims 47, 49 and 51, it is obvious that the axis of the transducer in the system of Satoh in view of Patrice is oriented within 20 degrees of the axis of rotation of the occupant's head when the occupant's head moves.

3. Claims 33, 37 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh in view of Patrice and further in view of Kishinaga et al. (US Patent 5,131,051).

Regarding Claims 33, 37 and 41, as shown above apropos of Claims 32, 36 and 40, respectively, the combination of Satoh and Patrice makes obvious all elements except the plurality of transducers being coupled to a single equalizer.

Kishinaga discloses a sound field control system (Fig. 2) that uses a single equalizer 21 to control a plurality of parallel loudspeakers (25, 26) (column 7, lines 7-14). One skilled in the art would have known that such an arrangement provides economy by avoiding duplication of components. As such, it would have been obvious to one skilled in the art at the time of the invention to apply the single equalizer to control a plurality of parallel loudspeakers taught by

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Kishinaga to the combination made obvious by Satoh and Patrice for the purpose of realizing the aforesaid advantage.

Allowable Subject Matter

4. Claims 34-35, 38-39, 42-43, 48, 50, 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUYEN D. LE whose telephone number is (571) 272-7502. The examiner can normally be reached on 9:30AM-6:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SINH TRAN can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUYEN D. LE/
Primary Examiner, Art Unit 2615

HL
March 14, 2008

<div>Application Number</div> <div></div>	Application/Control No.	Applicant(s)/Patent under Reexamination	
	09/532,907	HOLMI ET AL.	
	Examiner	Art Unit	
	HUYEN D. LE	2615	